



cleansat

BB-18
Demisable Magnetoquer
Lusospace

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- Key Issue: Survival of the Core.
- Shielding effect (system level and equally at Magnetorquer level) hinders the heat exposition of the Magnetorquers subsystem.

- Materials
- Architecture
- Joints



Full core exposure as early as possible in re-entry.

Description	Medium/Large LEO Platform
Magnetic Dipole Moment Range (A.m ²)	±200
Linearity Error	≤ 2%
Time constant	< 200 ms
Residual magnetic moment (A.m ²)	≤ 1.5% full linear scale range
Linear Voltage (V)	±28
Linear Power (W)	≤ 6
Number of Coils	2
Length (mm)	≤ 750
Lifetime	10/15 years (plus 10 on-ground)
Operating Temperature	-15 to +65 °C
Non-operating Temperature	-30 to +80 °C

➔ Scalability to 300 A.m²

- Minor System Level Impacts – Very slightly increase in power supply foreseen.